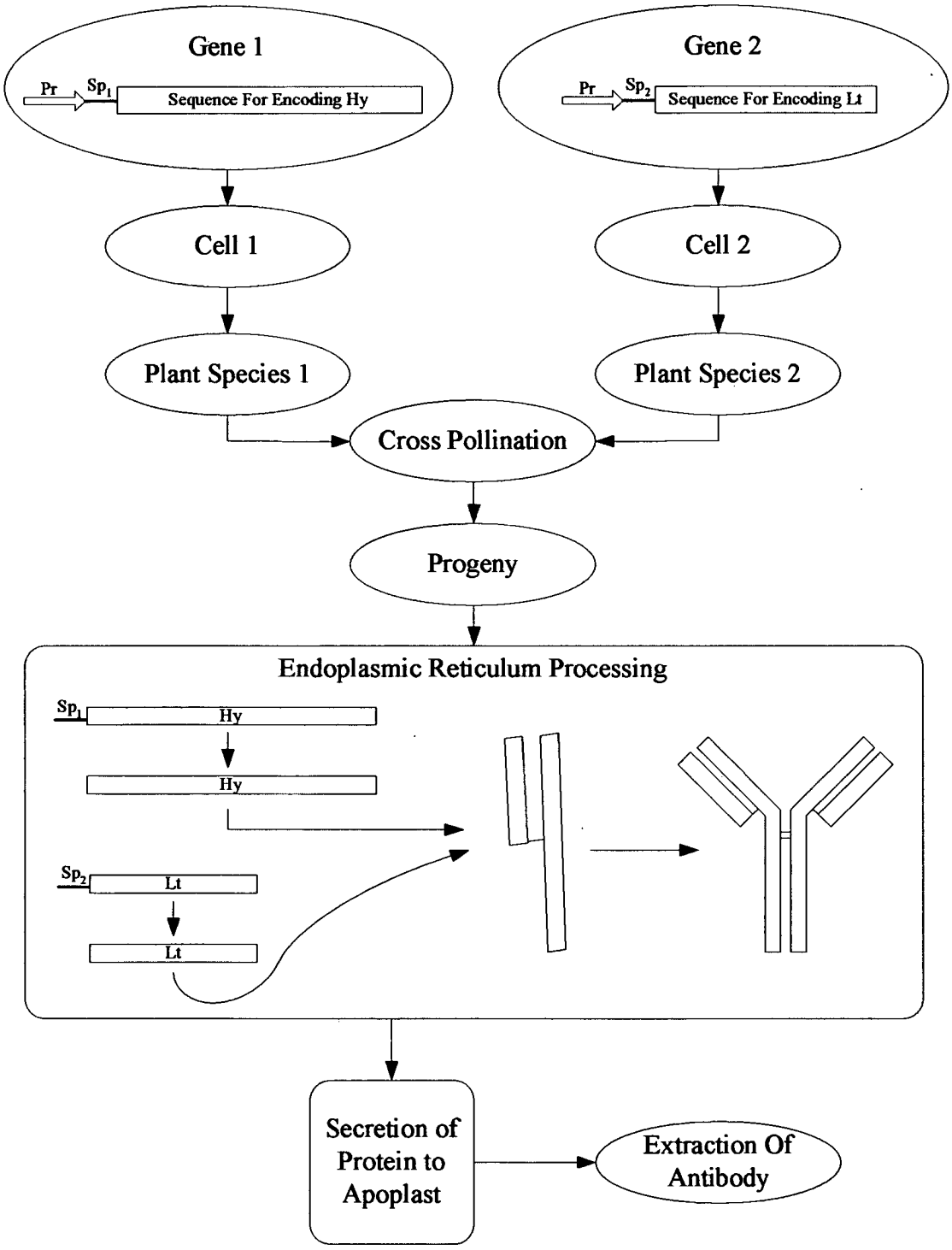
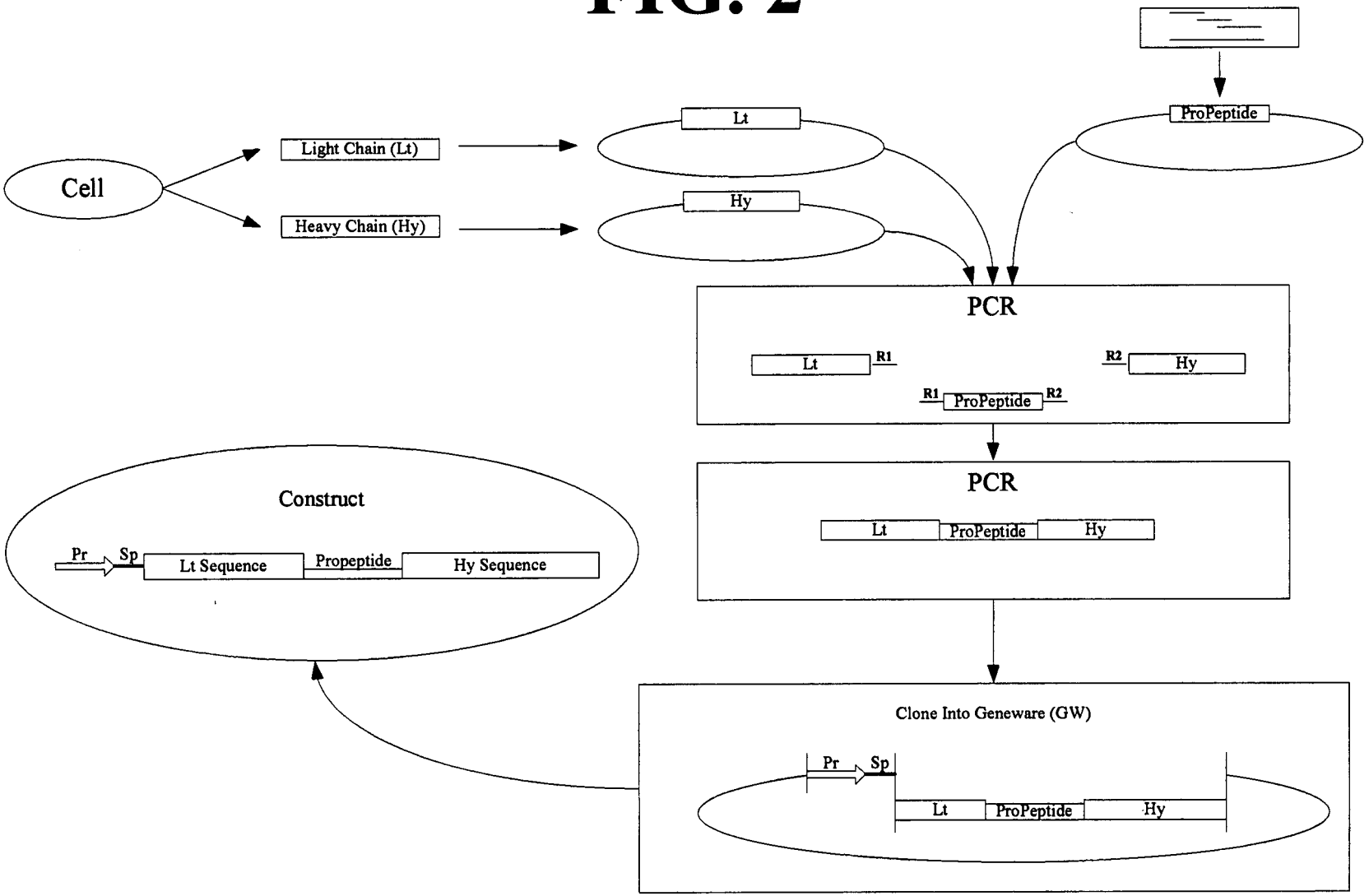
# FIG 1

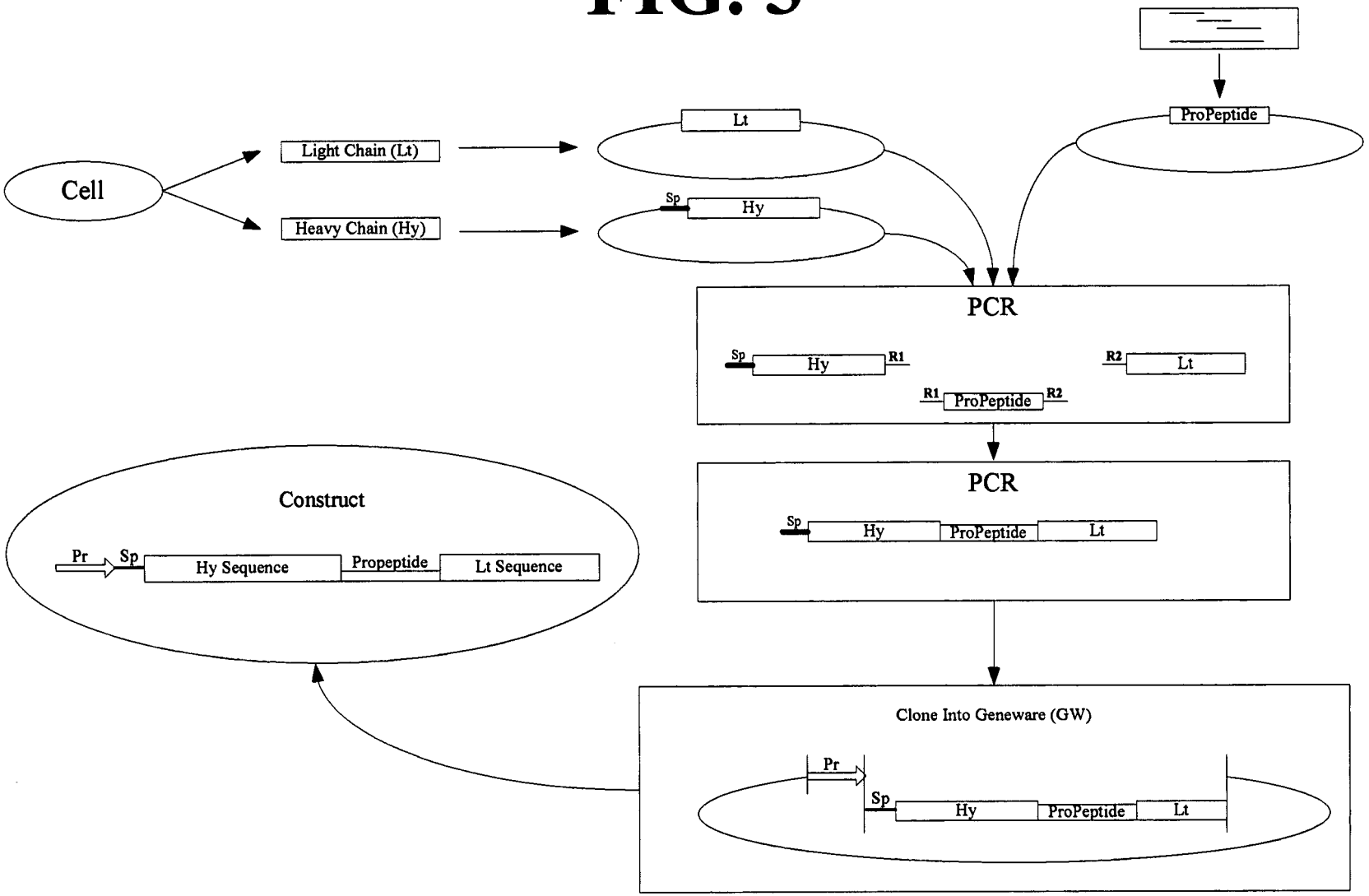
## Prior Art



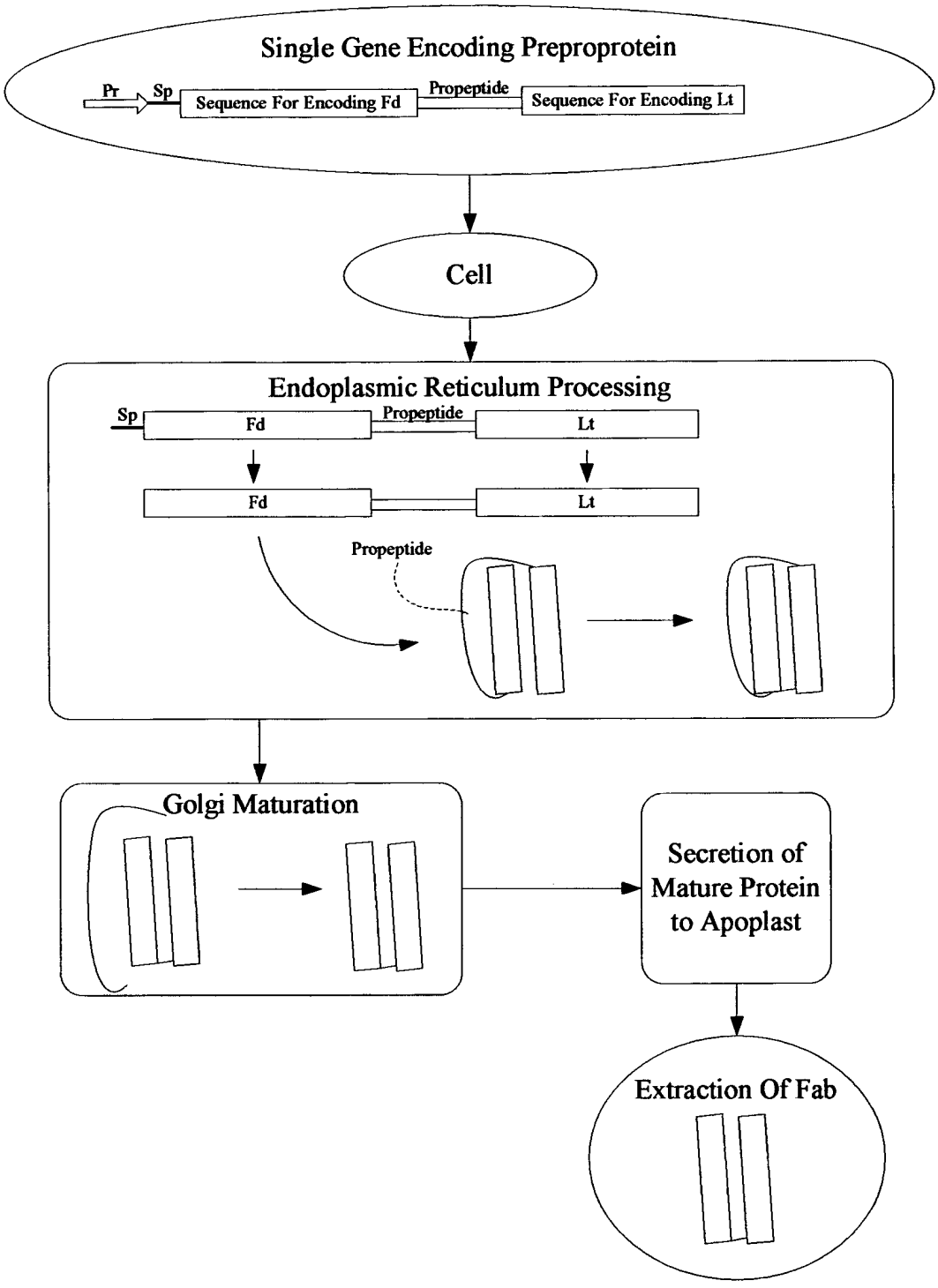
# FIG. 2


Cell
Light Chain (Lt)
Heavy Chain (Hy)
Lt
Hy
ProPeptide
PCR
Lt
R1
R2
Hy
R1
ProPeptide
R2
PCR
Lt
ProPeptide
Hy
Construct
Pr
Sp
Lt Sequence
Propeptide
Hy Sequence
Clone Into Geneware (GW)
Pr
Sp
Lt
ProPeptide
Hy

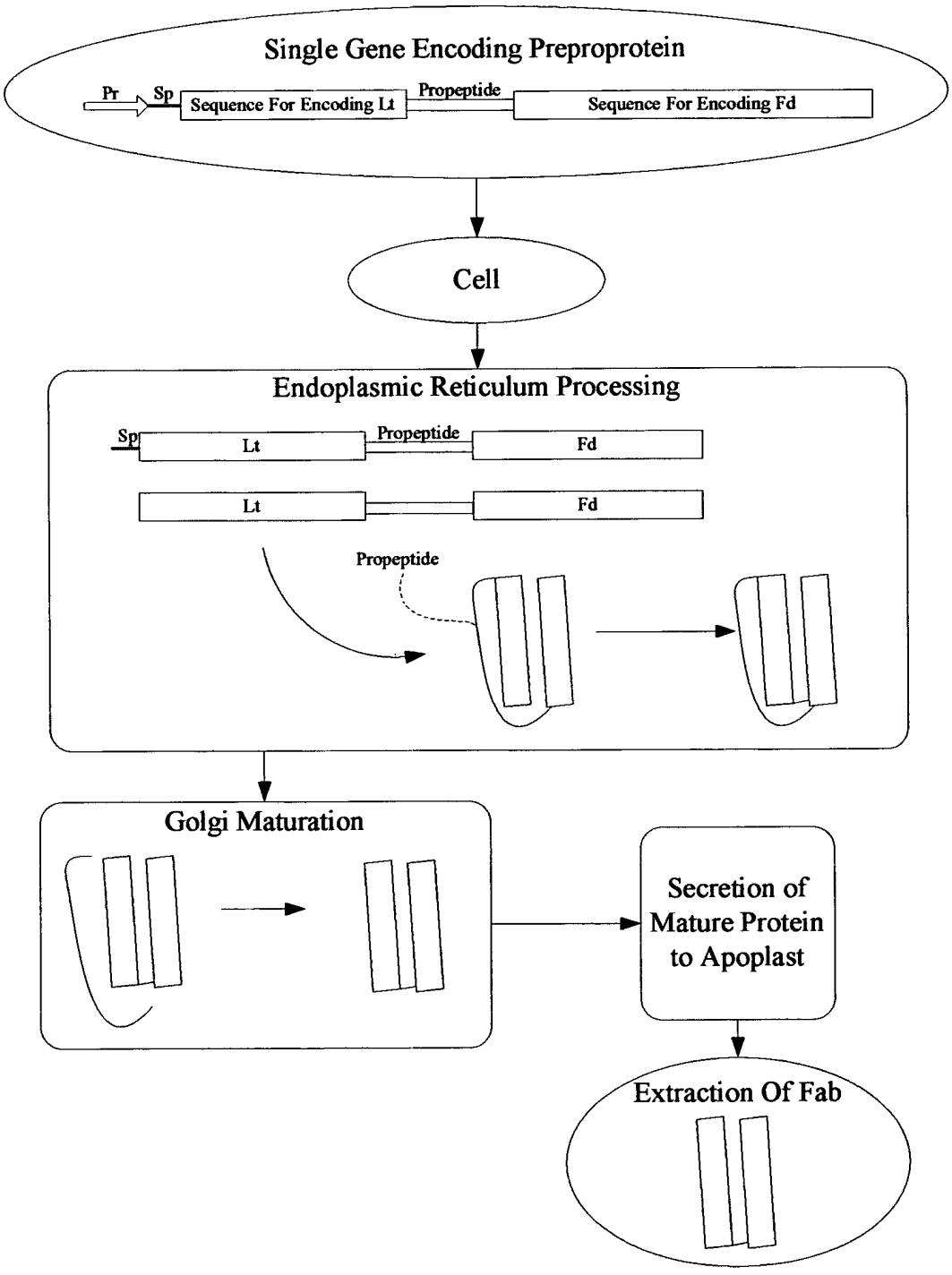
# FIG. 3


Cell
Light Chain (Lt)
Heavy Chain (Hy)
Lt
Sp
Hy
ProPeptide
PCR
Sp
Hy
R1
R2
Lt
R1
ProPeptide
R2
PCR
Sp
Hy
ProPeptide
Lt
Construct
Pr
Sp
Hy Sequence
Propeptide
Lt Sequence
Clone Into Geneware (GW)
Pr
Sp
Hy
ProPeptide
Lt

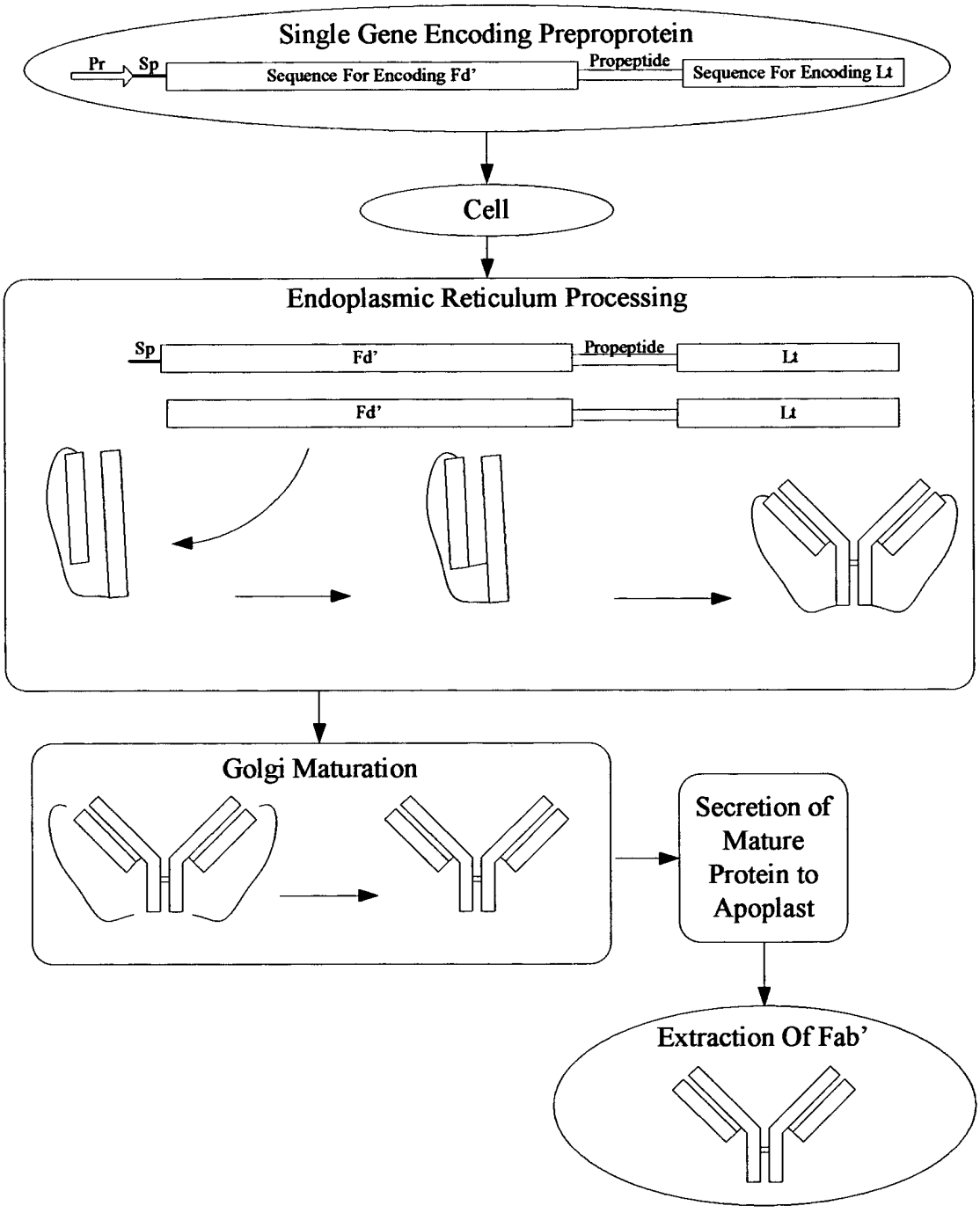
# FIG. 4


Single Gene Encoding Preproprotein
Pr
Sp
Sequence For Encoding Fd
Propeptide
Sequence For Encoding Lt
Cell
Endoplasmic Reticulum Processing
Sp
Fd
Propeptide
Lt
Fd
Lt
Propeptide
Golgi Maturation
Secretion of Mature Protein to Apoplast
Extraction Of Fab

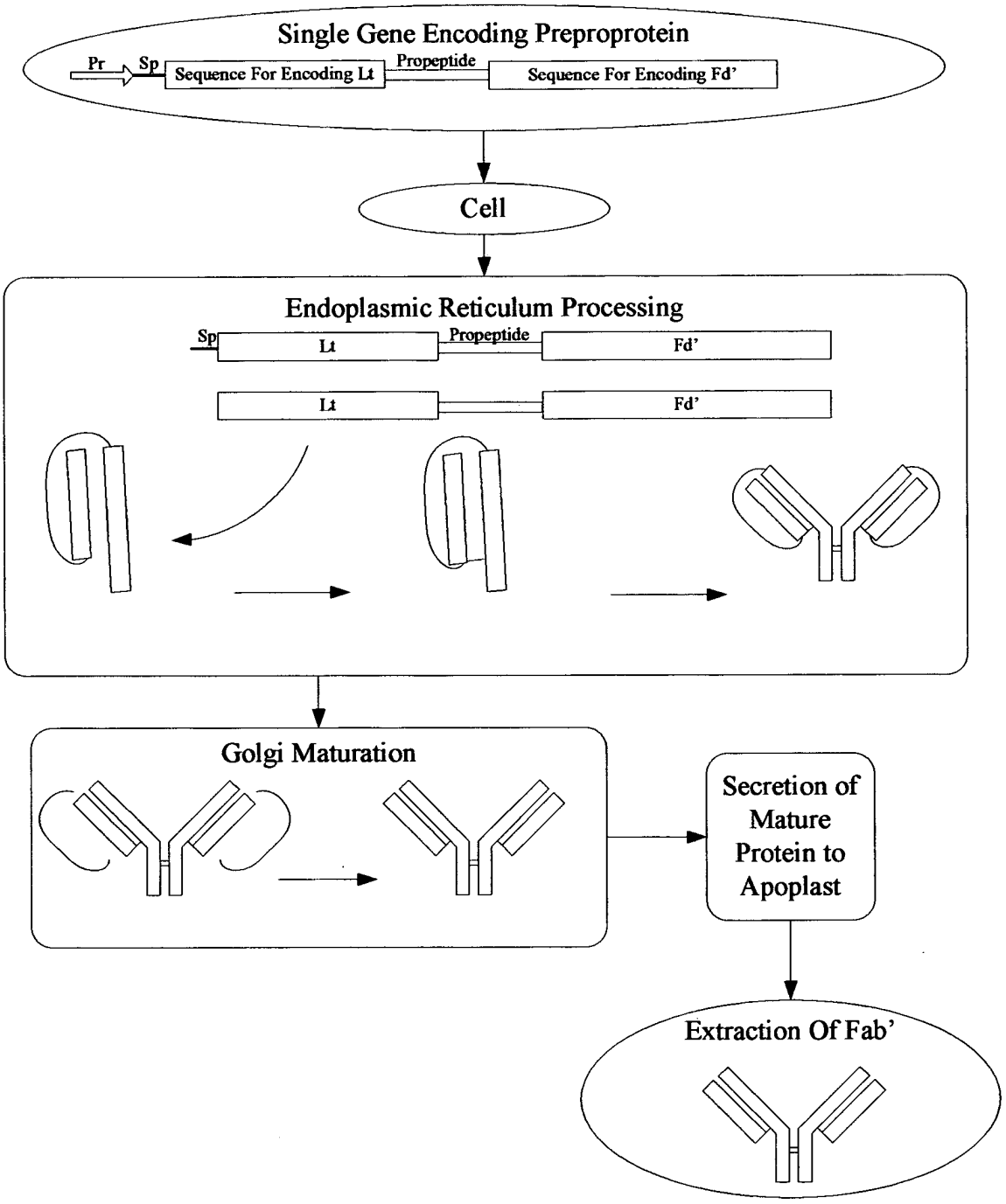
# FIG. 5


Single Gene Encoding Preproprotein
Pr
Sp
Sequence For Encoding Lt
Propeptide
Sequence For Encoding Fd
Cell
Endoplasmic Reticulum Processing
Sp
Lt
Propeptide
Fd
Lt
Fd
Propeptide
Golgi Maturation
Secretion of Mature Protein to Apoplast
Extraction Of Fab

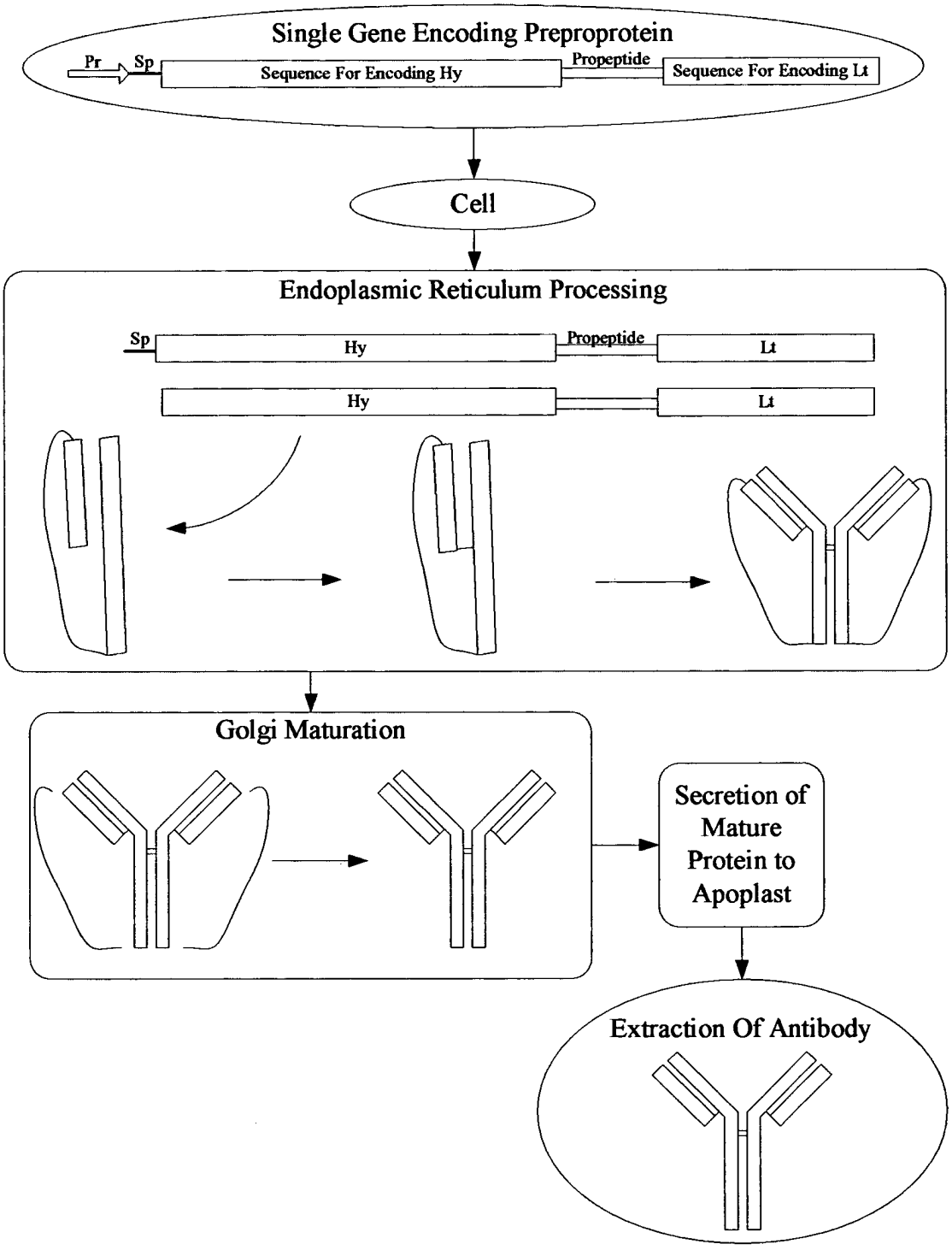
# FIG 6


Single Gene Encoding Preproprotein
Pr
Sp
Sequence For Encoding Fd'
Propeptide
Sequence For Encoding Lt
Cell
Endoplasmic Reticulum Processing
Sp
Fd'
Propeptide
Lt
Fd'
Lt
Golgi Maturation
Secretion of Mature Protein to Apoplast
Extraction Of Fab'

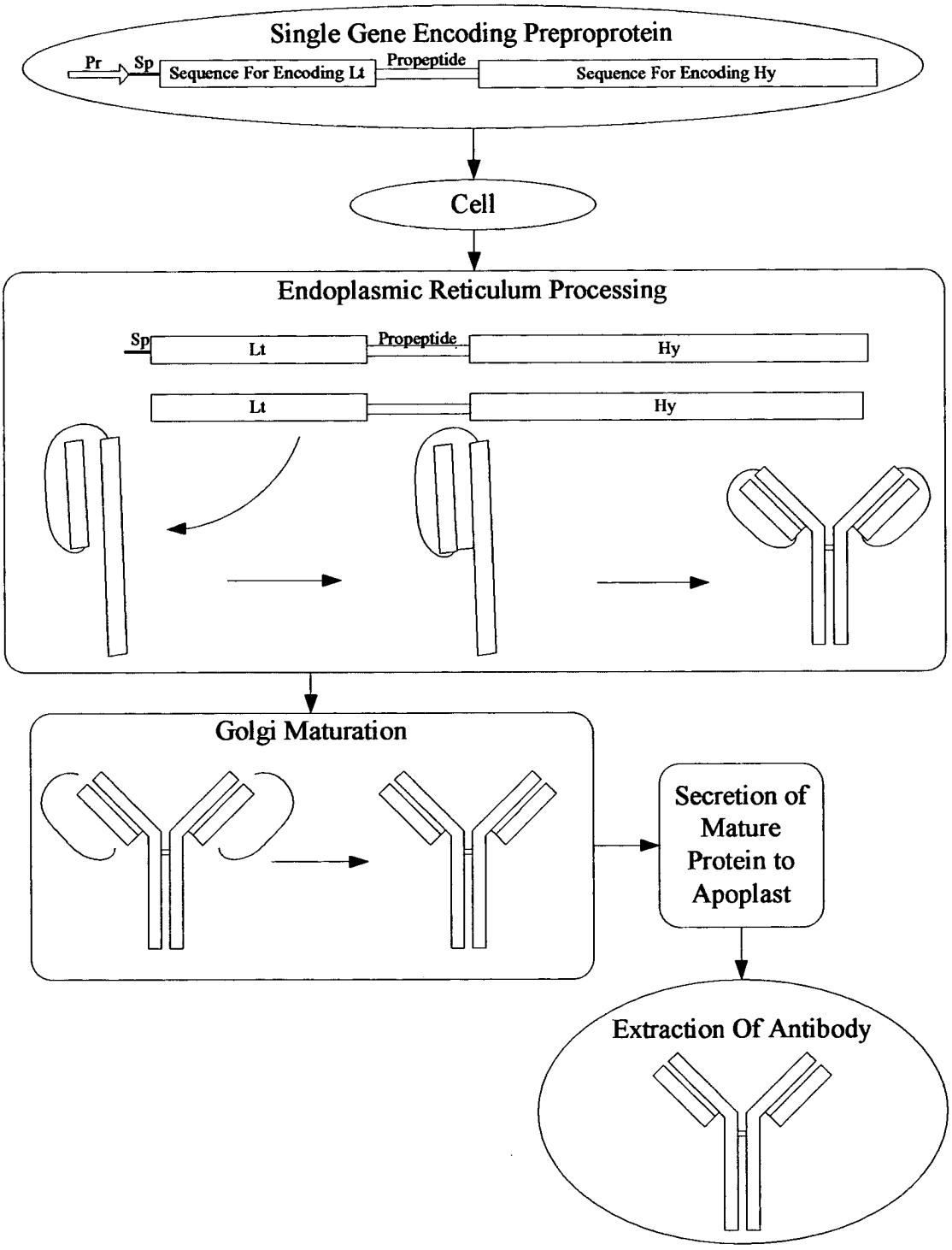
# FIG 7


Single Gene Encoding Preproprotein
Pr
Sp
Sequence For Encoding Lt
Propeptide
Sequence For Encoding Fd'
Cell
Endoplasmic Reticulum Processing
Sp
Lt
Propeptide
Fd'
Lt
Fd'
Golgi Maturation
Secretion of Mature Protein to Apoplast
Extraction Of Fab'

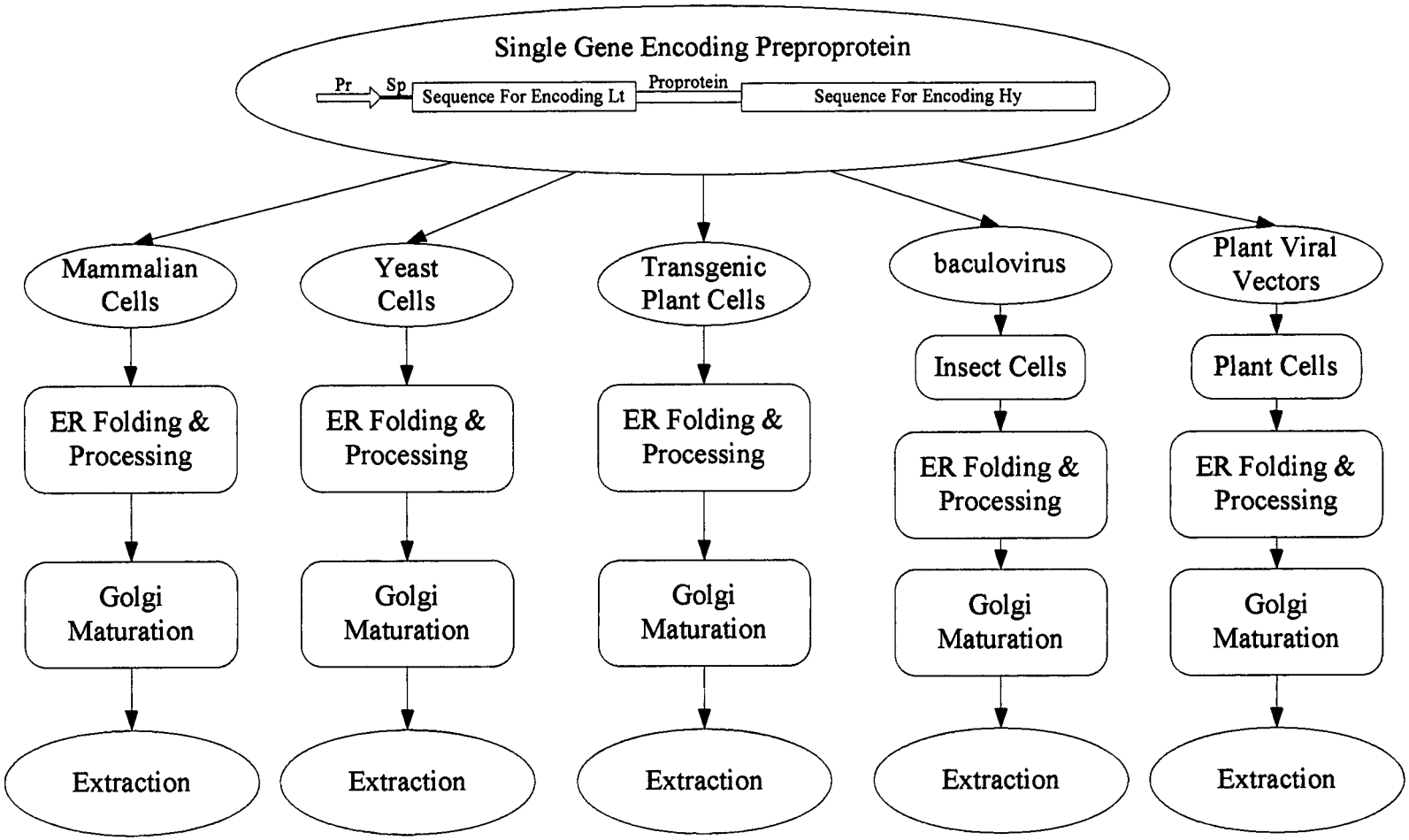
# FIG 8


Single Gene Encoding Preproprotein
Pr
Sp
Sequence For Encoding Hy
Propeptide
Sequence For Encoding Lt
Cell
Endoplasmic Reticulum Processing
Sp
Hy
Propeptide
Lt
Hy
Lt
Golgi Maturation
Secretion of Mature Protein to Apoplast
Extraction Of Antibody

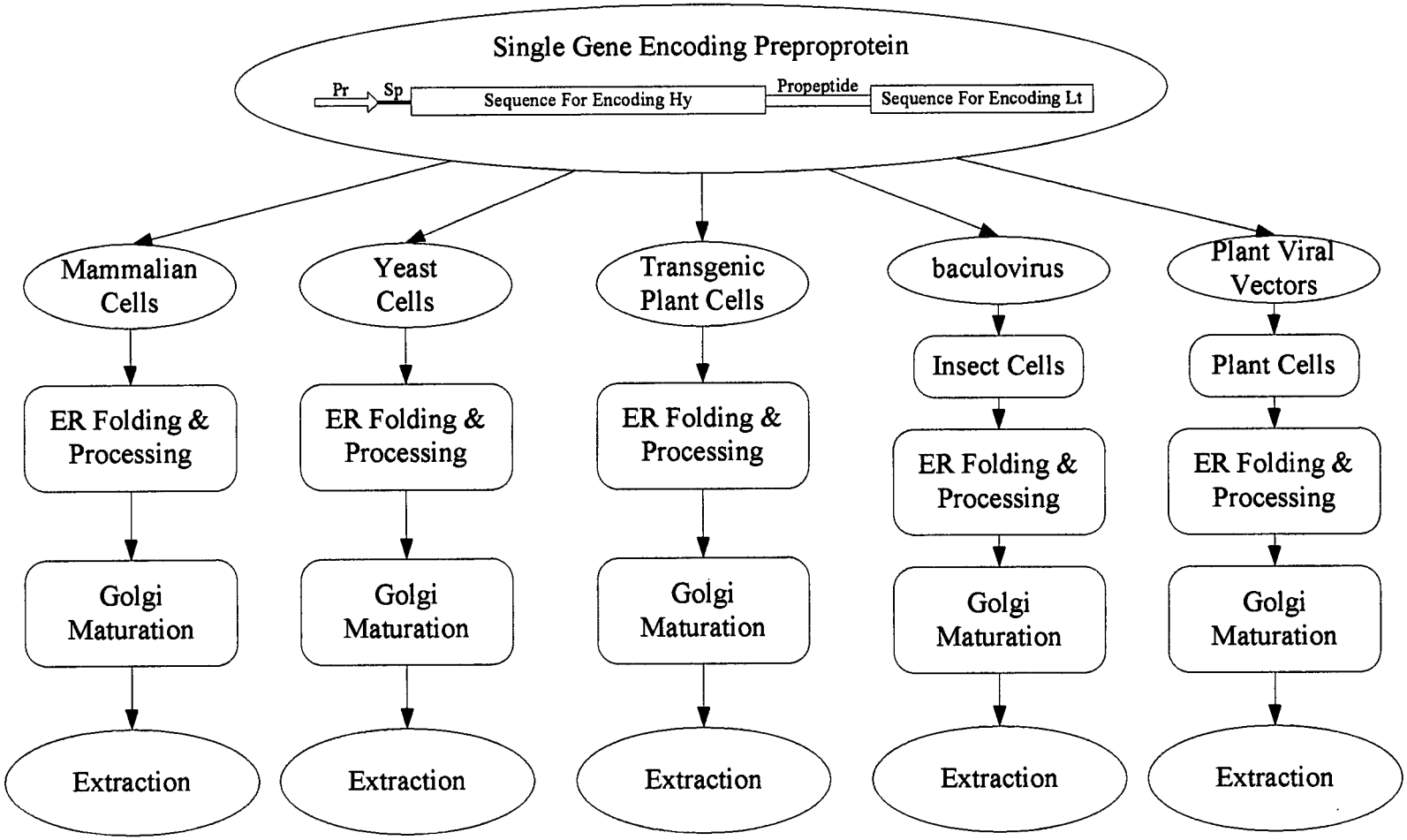
# FIG. 9


Single Gene Encoding Preproprotein
Pr
Sp
Sequence For Encoding Lt
Propeptide
Sequence For Encoding Hy
Cell
Endoplasmic Reticulum Processing
Sp
Lt
Propeptide
Hy
Lt
Hy
Golgi Maturation
Secretion of Mature Protein to Apoplast
Extraction Of Antibody

# FIG. 10


Single Gene Encoding Preproprotein
Pr
Sp
Sequence For Encoding Lt
Proprotein
Sequence For Encoding Hy
Mammalian Cells
Yeast Cells
Transgenic Plant Cells
baculovirus
Plant Viral Vectors
Insect Cells
Plant Cells
ER Folding & Processing
ER Folding & Processing
ER Folding & Processing
ER Folding & Processing
ER Folding & Processing
Golgi Maturation
Golgi Maturation
Golgi Maturation
Golgi Maturation
Golgi Maturation
Extraction
Extraction
Extraction
Extraction
Extraction

# FIG. 11


Single Gene Encoding Preproprotein
Pr
Sp
Sequence For Encoding Hy
Propeptide
Sequence For Encoding Lt
Mammalian Cells
Yeast Cells
Transgenic Plant Cells
baculovirus
Plant Viral Vectors
Insect Cells
Plant Cells
ER Folding & Processing
ER Folding & Processing
ER Folding & Processing
ER Folding & Processing
ER Folding & Processing
Golgi Maturation
Golgi Maturation
Golgi Maturation
Golgi Maturation
Golgi Maturation
Extraction
Extraction
Extraction
Extraction
Extraction